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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,216	02/24/2004	James Karanassos	449-120	8838

83336   7590   01/04/2011
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EXAMINER
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ART UNIT	PAPER NUMBER
2475	

MAIL DATE	DELIVERY MODE
01/04/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 October 2010</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This office action is in response to applicant's amendment filed on 10/20/2010.

2.   Claims 1-44 are currently pending.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-5, 11-17, 19-25, 31-37, and 39-44 are rejected under 35

U.S.C. 102(e) as being anticipated by Saha (US Publication No.: 2005/0105508).

   With respect to claim 1, Saha teaches a method for VOIP network that mainly

consists a sub-manager and multiple management clients (Figure 1; control locations in

the network). Figure 2 discloses an exemplary embodiment of a client management

device 36, or a CPE, for Internet telephony system operated by an Internet telephony

service provider (paragraph **0048**). Among other components, the CPE consists of an

Internet telephony object 56 that operates as a public switched telephone network

(PSTN) gateway for the plurality of PSTN devices 70 (paragraph **0056**). Thus a CPE

client management device 36 can act as an administrative entity for a particular Internet

telephony device from the client side. From Figure 1, to obtain management information

base 34 values from each of the clients 18a-18c, the sub-manager 20 maintains a

TCP/IP connection 45 with each client 18a-18c through the firewall 16a, 16b serving the

client. SNMP formatted messages are exchanged with each client 18a-18c over the

TCP/IP connection 45. When variable values 44 identified by a client object identifier

188 from the management information base 34 are received from a client 18a-18c, the

sub-manager 20 redefines each variable value 44 with a master object identifier 182

from the master management information base 32 and provides such master

management information base 32 values to the NMS 22 using SNMP messages over

traditional UDP/IP channels (paragraph **0046**).

Furthermore, Saha illustrates an exemplary operation of a connection module in

accordance with an embodiment in a flow chart of **Figure 4a**. Step 120 represents

associating with the client identifier **46**, in the active connections table **28**, each of: i) a

device state machine identifier 49 such as the memory address of the state machine 47;

ii) a client connection identifier 48; and iii) an identifier 51 indicating whether the TCP/IP

connection 45 with the device is active or inactive. Hence the active connection table 28

of sub-manager 20 keeps a record and analyzes the information obtained from clients to

determine if they are inactive.

To verify that the TCP/IP connection is open through the firewall, the sub-

manager may periodically exchange a TCP/IP frame with the client over the connection.

The sub-manager may determine that an open connection does not exist with the client

if either: i) the periodic TCP/IP frame has not been received from the client for a

predetermined time out period; or ii) the TCP/IP connection has been terminated

(paragraph **0020**, lines 1-8).

  With respect to claim 2, Saha discloses in the teaching that the sub-manager

20 operates as a SNMP agent to the network management system (NMS) 22. The sub-

manager connects to the clients to obtain information such as client object identifier

(COLD) 188 and variable value 44 (paragraphs **0045-0046**). It also disclosed that each

SNMP compliant agent implements relevant sections of a management information

base (MIB) that includes variables required for monitoring, configuring, and controlling

the client device (paragraph **0006**, lines 1-4). The teaching does not specifically define

the variable values 44 as uptime values but since the sub-manager needs a mean to

define the duration of the connections to be recorded in the active connection table 29,

it is inherent that any arbitrary value such as an uptime value can be set for the variable

value 44.

  With respect to claims 3 and 4, Saha discloses that after the TCP/IP

connection is made between the sub-manager and a client, a heart beat message with

a unique identifier such as a number derived from the MAC address of the client 18

(paragraph **0062**, lines 1-7). In the event that the heart beat timer exceeds the duration

of time specified in the previous heart beat message 113 (or a multiple of the duration of

time specified in the previous heart beat message 113) during which a subsequent

heart beat message 113 was not received as determined at step 123, it can be

assumed that the TCP/IP connection 45 no longer exists (paragraph **0090**). Therefore

based from the uptime value from claim 2, it is concluded that a determination for a

particular connection from the active connection table 29 is inactive when the uptime value exceeds the threshold level.

      With respect to claim 5, Saha teaches the threshold level of the heart beat message to determine inactivity comes from the previous heart beat message. Therefore the threshold level is variable since heart beat messages have different lengths. Thus it is concluded that a threshold value can be dependent on the previous heart beat message value (paragraph **0090**, lines 1-3}.

      With respect to claim 11, Saha discloses in Figure 3 a flow chart outlining the exemplary operation of the connection manager 78. Referring to the chart, in conjunction with Figure 1, step 94 represents sending a request or a command from the sub-manager to the SNMP agent module. The SNMP agent module works in conjunction with the sub-manager 20. Therefore the sub-manager includes an active connection table 28 that keeps track of all the TCP/IP call sessions within the communication network.

      With respect to claim 12, Saha teaches in Figure 1, the sub-manager 20 actively connects to each CPE client management device 36, or an administrative entity for a particular client, to exchange information from its master information base MIB 34. Information can be client object identifier (COLD) 188 and variable value 44, which can be set as uptime value (from claim 2). Once an IP connection is establish between the sub-manager and the client, the client network management request messages are sent to identify clients using variables within the MIB (paragraph **0018**, lines 1-3).

Referring to the chart in Figure 3, in conjunction with Figure 1, step 94 represents
sending a request or a command from the sub-manager to the SNMP agent module.
The SNMP agent module works in conjunction with the sub- manager 20. Therefore the
sub-manager includes an active connection table 28 that keeps track of all the TCP/IP
call sessions within the communication network.

With respect to claim 13, Saha teaches in order to verify that the TCP/IP
connection is open through the firewall, the sub-manager may periodically exchange a
TCP/IP frame with the client over the connection. The sub-manager may determine that
an open connection does not exist with the client if either: i) the periodic TCP/IP frame
has not been received from the client for a predetermined time out period; or ii) the
TCP/IP connection has been terminated (paragraph **0020**).

With respect to claim 14, Saha teaches the threshold level of the heart beat
message to determine inactivity comes from the previous heart beat message.
Therefore the threshold level is variable since heart beat messages have different
lengths. Thus it is concluded that a threshold value can be dependent on the previous
heart beat message value (paragraph **0090**, lines 1-3).

With respect to claim 15, Saha teaches that the threshold level is defined by
the duration of the heart beat message sent from the sub-manager to the client. It is
further noted that the sub-manager frequently sends a data frame through the TCP/IP
connection to verify if the connection with the client is still active (paragraph **0020**, lines
1-8). Since the sub-manager is capable of sending such data frame on a regular basis
in addition to the heart beat message to the client, it is inherent that the threshold level

of a heart beat message is affected by the processing load carried out by the sub-manager when a data frame is transmitted in conjunction with heart beat messages.

With respect to claim 16, Saha discloses in Figure 3 a flow chart outlining the exemplary operation of the connection manager 78. Referring to the chart, in conjunction with Figure 1, step 94 represents sending a request or a command from the sub-manager to the SNMP agent module, or the receiver. The SNMP agent module works in conjunction with the sub-manager 20. Therefore the sub- manager includes an active connection table 28 that keeps track of all the TCP/IP call sessions within the communication network.

Furthermore, Saha illustrates an exemplary operation of a connection module in accordance with an embodiment in a flow chart of Figure 4a. Step 120 represents associating with the client identifier 46, in the active connections table 28, each of: i) a device state machine identifier 49 such as the memory address of the state machine 47; ii) a client connection identifier 48; and iii) an identifier 51 indicating whether the TCP/IP connection 45 with the device is active or inactive. Hence the active connection table 28 of sub-manager 20 keeps a record and analyzes the information obtained from clients to determine if they are inactive.

With respect to claim 17, Saha discloses in the teaching that the sub-manager 20 operates as a SNMP agent to the network management system (NMS) 22. The sub-manager connects to the clients to obtain information such as client object identifier (COLD) 188 and variable value 44 (paragraphs **0045-0046**). It also disclosed that each SNMP compliant agent implements relevant sections of a management information

base (MIB) that includes variables required for monitoring, configuring, and controlling the client device (paragraph **0006**, lines 1-4}. The teaching does not specifically define the variable values 44 as uptime values but since the sub-manager needs a mean to define the duration of the connections to be recorded in the active connection table 29, it is inherent that any arbitrary value such as an uptime value can be set for the variable value 44.

Saha also discloses that after the TCP/IP connection is made between the sub-manager and a client, a heart beat message with a unique identifier such as a number derived from the MAC address of the client 18 (paragraph **0062**, lines 1-7}. In the event that the heart beat timer exceeds the duration of time specified in the previous heart beat message 113 (or a multiple of the duration of time specified in the previous heart beat message 113) during which a subsequent heart beat message 113 was not received as determined at step 123, it can be assumed that the TCP/IP connection 45 no longer exists (paragraph **0090**). Therefore based from the uptime value from claim 2, it is concluded that a determination for a particular connection from the active connection table 29 is inactive when the uptime value exceeds the threshold level.

With respect to claim 19, Saha discloses in Figure 3 a flow chart outlining the exemplary operation of the connection manager 78. Referring to the chart, in conjunction with Figure 1, step 94 represents sending a request or a command from the sub-manager to the SNMP agent module. The SNMP agent module works in conjunction with the sub-manager 20. Therefore the sub-manager includes an active

connection table 28 that keeps track of all the TCP/IP call sessions within the
communication network.

With respect to claim 20, Saha teaches that the administrative entity, such as
the client management device 36 in Figure 1, connects to the sub-manager 20 to
exchange information relating to VoIP calls. When a device (such as client 18a) on a
private network (such as private network 14a) opens a TCP/IP connection with a
globally addressable device coupled to the Internet 12 (such as the sub- manager 20),
the client 18a sends a TCP/IP connection request on the private network 14a. The
TCP/IP connection request is routed to the NAT firewall 16a where it undergoes both IP
address and port translation before being routed to the sub-manager 20 on the Internet
12 (paragraph **0041**).

Additionally, Figure 3 states that after the TCP/IP connection 45 is established
with the sub-manager 20, the connections module 78 identifies the CPE client 18 to the
sub-manager 20 at step 92. Step 92 includes sending an SNMP Inform message (which
also functions as the first heart beat message 113) with a unique identifier such as a
number derived from the MAC address of the client 18. Following step 92, the
connection manager 78 operates as an event driven state machine sustaining an event
loop at box 93 with four exemplary events triggering the connections module 78 to
perform corresponding actions (paragraph **0062**).

Furthermore, to verify that the TCP/IP connection is open through the firewall, the
sub-manager may periodically exchange a TCP/IP frame with the client over the
connection. The sub-manager may determine that an open connection does not exist

with the client if either: i) the periodic TCP/IP frame has not been received from the

client for a predetermined time out period; or ii) the TCP/IP connection has been

terminated (paragraph **0020**, lines 1-8). Therefore it is inherent that the administrative

entity in the client management device 36 is capable of terminating the IP connection

with the sub-manager by sending a command to disconnect the CPE from the sub-

manager.

      With respect to claim 21, Saha teaches a communication network supporting

VoIP (Voice over IP) technology that mainly consists of a sub-manager and multiple

management clients (Figure 1). Figure 2 discloses an exemplary embodiment of a client

management device 36, or a CPE, for Internet telephony system operated by an

Internet telephony service provider (paragraph **0048**). Among other components, the

CPE consists of an Internet telephony object 56 that operates as a public switched

telephone network (PSTN) gateway for the plurality of PSTN devices 70 (paragraph

0056). Thus a CPE client management device 36 can act as an administrative entity for

a particular Internet telephony device from the client side. From Figure 1, to obtain

management information base 34 values from each of the clients 18a-18c, the sub-

manager 20, the receiver, maintains a TCP/IP connection 45 with each client 18a-18c

through the firewall 16a, 16b serving the client. SNMP formatted messages are

exchanged with each client 18a-18c over the TCP/IP connection 45. When variable

values 44 identified by a client object identifier 188 from the management information

base 34 are received from a client 18a-18c, the sub-manager 20 redefines each

variable value 44 with a master object identifier 182 from the master management

information base 32 and provides such master management information base 32 values

to the NMS 22 using SNMP messages over traditional UDP/IP channels (paragraph

0046).

Furthermore, Saha illustrates an exemplary operation of a connection module in

accordance with an embodiment in a flow chart of Figure 4a. Step 120 represents

associating with the client identifier 46, in the active connections table 28, each of: i) a

device state machine identifier 49 such as the memory address of the state machine 47;

ii) a client connection identifier 48; and iii) an identifier 51 indicating whether the TCP/IP

connection 45 with the device is active or inactive. Hence the active connection table

28, or the analyzer, of sub-manager 20 keeps a record and analyzes the information

obtained from clients to determine if they are inactive.

To verify that the TCP/IP connection is open through the firewall, the sub-

manager may periodically exchange a TCP/IP frame with the client over the connection.

The sub-manager may determine that an open connection does not exist with the client

if either: i) the periodic TCP/IP frame has not been received from the client for a

predetermined time out period; or ii) the TCP/IP connection has been terminated

(paragraph **0020**, lines 1-8).

With respect to claim 22, Saha discloses in the teaching that the sub-manager

20 operates as a SNMP agent to the network management system (NMS) 22. The sub-

manager connects to the clients to obtain information such as client object identifier

(COLD) 188 and variable value 44 (paragraphs **0045-0046**). It also disclosed that each

SNMP compliant agent implements relevant sections of a management information

base (MIB) that includes variables required for monitoring, configuring, and controlling

the client device (paragraph **0006**, lines 1-4). The teaching does not specifically define

the variable values 44 as uptime values but since the sub-manager needs a mean to

define the duration of the connections to be recorded in the active connection table 29,

it is inherent that any arbitrary value such as an uptime value can be set for the variable

value 44.

      With respect to claims 23 and 24, Saha discloses that after the TCP/IP

connection is made between the sub-manager and a client, a heart beat message with

a unique identifier such as a number derived from the MAC address of the client 18

(paragraph 0062, lines 1-7}. In the event that the heart beat timer exceeds the duration

of time specified in the previous heart beat message 113 (or a multiple of the duration of

time specified in the previous heart beat message 113) during which a subsequent

heart beat message 113 was not received as determined at step 123, it can be

assumed that the TCP/IP connection 45 no longer exists (paragraph **0090**). Therefore

based from the uptime value from claim 2, it is concluded that a determination for a

particular connection from the active connection table 29 is inactive when the uptime

value exceeds the threshold level.

      With respect to claim 25, Saha teaches the threshold level of the heart beat

message to determine inactivity comes from the previous heart beat message.

Therefore the threshold level is variable since heart beat messages have different

lengths. Thus it is concluded that a threshold value can be dependent on the previous

heart beat message value (paragraph **0090**, lines 1-3).

With respect to claim 31, Saha discloses in Figure 3 a flow chart outlining the

exemplary operation of the connection manager 78. Referring to the chart, in

conjunction with Figure 1, step 94 represents sending a request or a command from the

sub-manager to the SNMP agent module. The SNMP agent module works in

conjunction with the sub-manager 20. Therefore the sub-manager includes an active

connection table 28 that keeps track of all the TCP/IP call sessions within the

communication network.

With respect to claim 32, Saha teaches in Figure 1, the sub-manager 20 on a

VOIP network actively connects to each CPE client management device 36, or an

administrative entity for a particular client, to exchange information from its master

information base MIB 34. Information can be client object identifier (COLD) 188 and

variable value 44, which can be set as uptime value (from claim 2). Once an IP

connection is establish between the sub-manager and the client, the client network

management request messages are sent to identify clients using variables within the

MIB (paragraph **0018**, lines 1-3).

Referring to the chart in Figure 3, in conjunction with Figure 1, step 94 represents

sending a request or a command from the sub-manager to the SNMP agent module.

The SNMP agent module works in conjunction with the sub- manager 20. Therefore the

sub-manager includes an active connection table 28 that keeps track of all the TCP/IP

call sessions within the communication network.

With respect to claim 33, Saha teaches in order to verify that the TCP/IP

connection is open through the firewall, the sub-manager may periodically exchange a

TCP/IP frame with the client over the connection. The sub-manager may determine that

an open connection does not exist with the client if either: i) the periodic TCP/IP frame

has not been received from the client for a predetermined time out period; or ii) the

TCP/IP connection has been terminated (paragraph **0020**).

With respect to claim 34, Saha teaches the threshold level of the heart beat

message to determine inactivity comes from the previous heart beat message.

Therefore the threshold level is variable since heart beat messages have different

lengths. Thus it is concluded that a threshold value can be dependent on the previous

heart beat message value (paragraph **0090**, lines 1-3).

With respect to claim 35, Saha teaches that the threshold level is defined by

the duration of the heart beat message sent from the sub-manager to the client. It is

further noted that the sub-manager frequently sends a data frame through the TCP/IP

connection to verify if the connection with the client is still active (paragraph **0020**, lines

1-8). Since the sub-manager is capable of sending such data frame on a regular basis

in addition to the heart beat message to the client, the threshold level of a heart beat

message must be affected by the processing load carried out by the sub-manager when

a data frame is transmitted in conjunction with heart beat messages.

With respect to claim 36, Saha discloses in Figure 3 a flow chart outlining the

exemplary operation of the connection manager 78. Referring to the chart, in

conjunction with Figure 1, step 94 represents sending a request or a command from the

sub-manager to the SNMP agent module, or the receiver. The SNMP agent module

works in conjunction with the sub-manager 20. Therefore the sub- manager includes an

active connection table 28 that keeps track of all the TCP/IP call sessions within the communication network.

Furthermore, Saha illustrates an exemplary operation of a connection module in accordance with an embodiment in a flow chart of Figure 4a. Step 120 represents associating with the client identifier 46, in the active connections table 28, each of: i) a device state machine identifier 49 such as the memory address of the state machine 47; ii) a client connection identifier 48; and iii) an identifier 51 indicating whether the TCP/IP connection 45 with the device is active or inactive. Hence the active connection table 28 of sub-manager 20 keeps a record and analyzes the information obtained from clients to determine if they are inactive.

With respect to claim 37, Saha discloses in Figure 3 a flow chart outlining the exemplary operation of the connection manager 78. Referring to the chart, in conjunction with Figure 1, step 94 represents sending a request or a command from the sub-manager to the SNMP agent module, or the receiver. The SNMP agent module works in conjunction with the sub-manager 20. Therefore the sub- manager includes an active connection table 28 that keeps track of all the TCP/IP call sessions within the communication network.

Furthermore, Saha illustrates an exemplary operation of a connection module in accordance with an embodiment in a flow chart of Figure 4a. Step 120 represents associating with the client identifier 46, in the active connections table 28, each of: i) a device state machine identifier 49 such as the memory address of the state machine 47; ii) a client connection identifier 48; and iii) an identifier 51 indicating whether the TCP/IP

connection 45 with the device is active or inactive. Hence the active connection table 28
of sub-manager 20 keeps a record and analyzes the information obtained from clients to
determine if they are inactive.

With respect to claim 39, Saha discloses in Figure 3 a flow chart outlining the
exemplary operation of the connection manager 78. Referring to the chart, in
conjunction with Figure 1, step 94 represents sending a request or a command from the
sub-manager to the SNMP agent module. The SNMP agent module works in
conjunction with the sub-manager 20. Therefore the sub-manager includes an active
connection table 28 that keeps track of all the TCP/IP call sessions within the
communication network.

With respect to claims 40 and 41, Saha teaches that the administrative entity
on a VOIP network, such as the client management device 36 in Figure 1, connects to
the sub-manager 20 to exchange information relating to VoIP calls. When a device
(such as client 18a) on a private network (such as private network 14a) opens a TCP/IP
connection with a globally addressable device coupled to the Internet 12 (such as the
sub- manager 20), the client 18a sends a TCP/IP connection request on the private
network 14a. The TCP/IP connection request is routed to the NAT firewall 16a where it
undergoes both IP address and port translation before being routed to the sub-manager
20 on the Internet 12 (paragraph **0041**).

Additionally, Figure 3 states that after the TCP/IP connection 45 is established
with the sub-manager 20, the connections module 78 identifies the CPE client 18 to the
sub-manager 20 at step 92. Step 92 includes sending an SNMP Inform message (which

also functions as the first heart beat message 113) with a unique identifier such as a number derived from the MAC address of the client 18. Following step 92, the connection manager 78 operates as an event driven state machine sustaining an event loop at box 93 with four exemplary events triggering the connections module 78 to perform corresponding actions (paragraph **0062**).

Saha also illustrates an exemplary operation of a connection module in accordance with an embodiment in a flow chart of Figure 4a. Step 120 represents associating with the client identifier 46, in the active connections table 28, each of: i) a device state machine identifier 49 such as the memory address of the state machine 47; ii) a client connection identifier 48; and iii) an identifier 51 indicating whether the TCP/IP connection 45 with the device is active or inactive. Hence the active connection table 28 of sub-manager 20 keeps a record and analyzes the information obtained from clients to determine if they are inactive.

Furthermore, to verify that the TCP/IP connection is open through the firewall, the sub-manager may periodically exchange a TCP/IP frame with the client over the connection. The sub-manager may determine that an open connection does not exist with the client if either: i) the periodic TCP/IP frame has not been received from the client for a predetermined time out period; or ii) the TCP/IP connection has been terminated (paragraph **0020**, lines 1-8). Therefore it is inherent that the administrative entity in the client management device 36 is capable of terminating the IP connection with the sub-manager by sending a command to disconnect the CPE from the sub-manager.

With respect to claims 42, 43 and 44, Saha teaches of a session controller 28 on a VOIP network of the sub-manager 20 in Figure 1. From Figure 1, it is inherent that the session controller 28 has the capability of a receiver since information such as the COID 188 and the variable values 44 from the administrative entity 36 is being sent for storing to the table. Therefore, the session controller 28, as a receiver, can receive information sent from the administrative entity with regards to information and command or request to terminate call sessions recorded in the table.

Since the session controller 28 is coupled to the client management devices through a TCP/IP connection for exchanging information, it is disclosed that the information such as a client request message is being sent to the administrative entity via the request state machine 39. Hence the request state machine 29 is capable of transmitting information to the administrative entity as taught by Saha (paragraph **0015**).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saha (US Publication No. 2005/0105508).

With respect to claim 6, Saha teaches a predetermined time out period can be set as a threshold level in case the connection goes inactive (paragraph **0020**, lines 1-

7). Additionally, from claims 4 and 5 the threshold level is dependent on the previous

heart beat message.

Sara does not disclose the predetermined time for the threshold set to 180

minutes.

Office Notice is taken that both the practice of using a specific time for a threshold is

well known and expected in the art. It would have been obvious to use a specific

time of 180 minutes to configure the threshold of Saha.

With respect to claim 26, Saha teaches a predetermined time out period can be

set as a threshold level in case the connection goes inactive (paragraph **0020**, lines 1-

7). Additionally, from claims 4 and 5 the threshold level is dependent on the previous

heart beat message.

Sara does not disclose the predetermined time for the threshold set to 180

minutes.

Office Notice is taken that both the practice of using a specific time for a threshold is

well known and expected in the art. It would have been obvious to use a specific

time of 180 minutes to configure the threshold of Saha.

7.   Claims 7-10, 18, 27-30, and 38 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Saha (US Publication No. 2005/0105508) in view of Tezuka et al (US

Publication No. 2003/0107991).

With respect to claim 7, Saha discloses in the teaching that the sub-manager

20 operates as a SNMP agent to the network management system (NMS) 22. The sub-

manager connects to the clients to obtain information such as client object identifier

(COLD) 188 and variable value 44 (paragraphs **0045-0046**).

Saha fails to teach the information obtained from the administrative entity

includes at least one of numbers of data packets transmitted and received during VoIP

calls.

Tezuka et al disclose in the teaching a technique for transferring audio (sound or

voice) data by using VoIP network. The system has a call agent (CA) to execute call

control outgoing and incoming calls with the PSTN. For an IP telephone call based on

H.323, the CA designates the IP address of the VoIP-GW of a destination, UDP-Port,

codec format (e.g., G. 711, G. 723, G729), and the like. On the other hand, the CA

controls the VoIP-GW by using, e.g., Megaco (Media Gateway Control). The relay router

executes a relaying (forwarding) operation of an audio packet transmitted and received

by the VoIP-GW and an edge router and an IP packet of other data (paragraph **0004**,

lines 16-30). As a result, the relay obtains information regarding to the number of

packets transmitted and received during VoIP calls from the call agent based on the

packet flow.

Therefore, it would have been obvious to one with ordinary skill in the art at the

time of the invention to modify the teaching of Saha to include such information

concerning packet flows as taught by Tezuka et al. One is motivated as such to monitor

the packet flow which passes through a relay router in a VoIP network and in which a

packet is transferred with a predetermined priority, and for, when congestion is

generated by generation of a new packet flow, maintaining a transfer state of a packet

of a packet flow established before the new packet flow is generated and transferred

with the predetermined priority (paragraph **0012**).

    With respect to claims 8, 9 and 18, Saha teaches the determination for

inactivity regarding VoIP calls using the threshold level of the heart beat message time.

    Saha, fails to teach such determination can be made based on the number of

data packets received and transmitted are unchanging over time and that a threshold

level to conclude inactivity can be utilized based on packet flow.

    Tezuka et al disclose a technique to monitor audio data flow in a VoIP

communication system to prevent data congestion based on a threshold level.

According to the teaching, each relay router detects an audio packet transferred on

each of the new audio packet flows and executes congestion determination per audio

packet. The congestion determination is executed by checking whether a sum total of

bands used by "high-priority (H)" packet flows exceeds a value (threshold value of the

congestion determination) set in advance by each relay router (paragraph **0063**). As a

result, when the call agent receives the congestion notice, a priority change sequence

or a disconnection sequence is executed (paragraph **0066**, lines 1-3).

    Therefore, it would have been obvious to one with ordinary skill in the art at the

time of the invention to modify the teaching of Saha to include the packet flow as a

threshold level in the determination for inactivity of VoIP calls as taught by Tezuka et al.

One is motivated as such to avoid the extent of network congestion from affecting high-

priority data packet flow relating to telephonic communications (paragraph **0069**, lines 7-

11).

Regarding claim 10, Saha teaches the threshold level of the heart beat message
to determine inactivity comes from the previous heart beat message. Therefore the
threshold level is variable since heart beat messages have different lengths. Thus it is
concluded that a threshold value can be dependent on the previous heart beat message
value (paragraph **0090**, lines 1-3).

With respect to claim 27, Saha discloses in the teaching that the sub-manager
20 operates as a SNMP agent to the network management system (NMS) 22. The sub-
manager connects to the clients to obtain information such as client object identifier
(COLD) 188 and variable value 44 (paragraphs **0045-0046**).

Saha fails to teach the information obtained from the administrative entity
includes at least one of numbers of data packets transmitted and received during VoIP
calls.

Tezuka et al disclose in the teaching a technique for transferring audio (sound or
voice) data by using VoIP network. The system has a call agent (CA) to execute call
control outgoing and incoming calls with the PSTN. For an IP telephone call based on
H.323, the CA designates the IP address of the VoIP-GW of a destination, UDP-Port,
codec format (e.g., G. 711, G. 723, G729), and the like. On the other hand, the CA
controls the VoIP-GW by using, e.g., Megaco (Media Gateway Control). The relay router
executes a relaying (forwarding) operation of an audio packet transmitted and received
by the VoIP-GW and an edge router and an IP packet of other data (paragraph **0004**,
lines 16-30). As a result, the relay obtains information regarding to the number of

packets transmitted and received during VoIP calls from the call agent based on the

packet flow.

Therefore, it would have been obvious to one with ordinary skill in the art at the

time of the invention to modify the teaching of Saha to include such information

concerning packet flows as taught by Tezuka et al. One is motivated as such to monitor

the packet flow which passes through a relay router in a VoIP network and in which a

packet is transferred with a predetermined priority, and for, when congestion is

generated by generation of a new packet flow, maintaining a transfer state of a packet

of a packet flow established before the new packet flow is generated and transferred

with the predetermined priority (paragraph **0012**).

With respect to claims 28, 29 and 38, Saha teaches the determination for

inactivity regarding VoIP calls using the threshold level of the heart beat message time.

Saha fails to teach such determination can be made based on the number of

data packets received and transmitted are unchanging over time and that a threshold

level to conclude inactivity can be utilized based on packet flow.

Tezuka et al disclose a technique to monitor audio data flow in a VoIP

communication system to prevent data congestion based on a threshold level.

According to the teaching, each relay router detects an audio packet transferred on

each of the new audio packet flows and executes congestion determination per audio

packet. The congestion determination is executed by checking whether a sum total of

bands used by "high-priority (14)" packet flows exceeds a value (threshold value of the

congestion determination) set in advance by each relay router (paragraph **0063**). As a

result, when the call agent receives the congestion notice, a priority change sequence
or a disconnection sequence is executed (paragraph **0066**, lines 1-3).

Therefore, it would have been obvious to one with ordinary skill in the art at the
time of the invention to modify the teaching of Saha to include the packet flow as a
threshold level in the determination for inactivity of VoIP calls as taught by Tezuka et al.
One is motivated as such to avoid the extent of network congestion from affecting high-
priority data packet flow relating to telephonic communications (paragraph **0069**, lines 7-
11).

With respect to claim 30, Saha further teaches the threshold level of the heart
beat message to determine inactivity comes from the previous heart beat message.
Therefore the threshold level is variable since heart beat messages have different
lengths. Thus it is concluded that a threshold value can be dependent on the previous
heart beat message value (paragraph **0090**, lines 1-3).

Response to Arguments

8.   Applicant's arguments filed on 10/202010 have been fully considered but they
are not persuasive.

A. Applicant argues with respect to reference Saha, see page 11 (last
paragraph), that "conception of the invention of this application prior to the effective
date of the Saha reference coupled with due diligence from prior to the Saha reference
date to the filing date of the present application. Applicant repeats this assertion here,
and thus submits that the Saha reference should be withdrawn."

        The Examiner maintains the rejection because MPEP 1706, section II, states that

"The benefits afforded by the Disclosure Document will depend directly upon the

adequacy of the disclosure. It is strongly recommended that the document contain a

clear and complete explanation of the manner and process of making using the

invention in sufficient detail to enable a person having ordinary knowledge in the field of

the invention to make and use the invention." MPEP 1706, section II, further states

"When the nature of the invention permits, a drawing or sketch should be included."

        The 6-page disclosure document (on page 5, fifth full paragraph) recites "ITXC

constructs an application that runs the specific command 'cli gk call cache' from a cron

job, every 5 minutes, measuring the call id's and uptime values for each id. Any call that

is over the set time limit (180min) will be released from the Session Controller, also via

command line script".

        The Examiner maintains that there is not sufficient detail or drawings in the

disclosure document to enable a person having ordinary skill in the field of the invention

to make and use the claimed feature in claim 1 of "sending at least one command from

the administrative entity to the one or more sessions controllers" based on the contents

of the 6-page disclosure document.

                                            Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian O'Connor whose telephone number is (571)270-1081. The examiner can normally be reached on M-F, 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571-272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian T. O'Connor
December 29, 2010
Patent Examiner

/DANG T TON/
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